

WHAT IS CLAIMED IS:

1. An applicator for dispensing a polymerizable or cross-linkable material, comprising:
  - an outer container;
  - an inner container disposed within said outer container, said inner container containing a polymerizable or cross-linkable material; and
  - a rate modifier for said polymerizable or cross-linkable material disposed on an outer surface of said inner container.
2. The applicator according to claim 1, wherein said outer container is flexible.
3. The applicator according to claim 1, wherein said outer container is a hollow, flexible cylinder.
4. The applicator according to claim 1, wherein said inner container is a frangible vial.
5. The applicator according to claim 4, wherein said frangible vial is made of glass or ceramic.
6. The applicator according to claim 1, wherein said rate modifier is in a non-contacting relationship with said polymerizable or cross-linkable material prior to opening of said inner container.
7. The applicator according to claim 1, wherein said rate modifier is lined or coated on said outer surface of said inner container.
8. The applicator according to claim 1, wherein said rate modifier is chemically bonded to said outer surface of said inner container.
9. The applicator according to claim 1, wherein said applicator is a syringe, a flexible cylinder, a tube, a pipette or an eye dropper.
10. The applicator according to claim 1, wherein said rate modifier comprises a detergent.
11. The applicator according to claim 1, wherein said rate modifier contains at least one member selected from the group consisting of a surfactant and an emulsifier.
12. The applicator according to claim 1, wherein said rate modifier is a polysorbate surfactant.

13. The applicator according to claim 1, wherein said rate modifier is a cationic surfactant.

14. The applicator according to claim 1, wherein said polymerizable or cross-linkable material is inorganic material or a combination of organic and inorganic materials.

15. The applicator according to claim 14, wherein said polymerizable or cross-linkable material is inorganic material selected from the group consisting of siloxanes, silicones, polysulfides, and polyphosphazenes.

16. The applicator according to claim 1, wherein said polymerizable or cross-linkable material is synthetic material selected from the group consisting of monomers that produce thermoplastic and thermoplastic elastomer polymers.

17. The applicator according to claim 16, wherein said polymers are selected from the group consisting of polyamides, nylon, polyvinylchloride, polycarbonates, polyethylene, polystyrene, polypropylene, fluorocarbon resins, polyurethane resins, acrylate resins and polyesters.

18. The applicator according to claim 1, wherein said polymerizable or cross-linkable material comprises 1,1-disubstituted ethylene monomer.

19. The applicator according to claim 18, wherein said monomer comprises an alpha-cyanoacrylate monomer.

20. The applicator according to claim 1, wherein said rate modifier is selected from the group consisting of alkylbenzyltrimethylammonium chloride, tetrabutylammonium bromide, sodium tetradecyl sulfate, dodecyltrimethyl(3-sulfopropyl)ammonium hydroxide, imidazole, tryptamine, urea, arginine, povidine, phosphines, triethyl phosphite, phosphonium salts, methyl gallate, ascorbic acid, tannic acid, sodium bisulfite, magnesium hydroxide, calcium sulfate, sodium silicate, thiourea, polysulfides, monensin, nonactin, calixarenes, polymeric epoxides, carbonates, cobalt naphthenate, manganese acetylacetonate and phase transfer catalysts.

21. The applicator of claim 1, wherein said polymerizable or cross-linkable material is organic.

22. The applicator of claim 1, wherein said rate modifier is a catalyst.

23. The applicator of claim 1, wherein the polymerizable or cross-linkable material is biocompatible.

24. A method of making an applicator for dispensing a polymerizable or cross-linkable material, comprising:

sealing a polymerizable or cross-linkable material in an inner container;  
applying a rate modifier for said polymerizable or cross-linkable material

5 to an outer surface of said inner container; and

disposing said inner container within an outer container having dispensing means for dispensing said polymerizable or cross-linkable material from said applicator.

25. The method according to claim 24, wherein said sealing step comprises sealing said polymerizable or cross-linkable material in a frangible vial.

26. The method according to claim 24, wherein said applying step comprises coating or lining an entire surface of said outer surface of said inner container with said rate modifier.

27. The method according to claim 24, wherein said applying step comprises coating or lining only a part of said outer surface of said inner container with said rate modifier.

28. A method of applying a polymerizable or cross-linkable material to a substrate, comprising:

providing an applicator according to claim 1;

opening said inner container of said dispenser to contact said

polymerizable or cross-linkable material with said rate modifier; and

dispensing said polymerizable or cross-linkable material from said outer container.

29. The method of claim 28, wherein said inner container is a frangible vial, and said opening step comprises breaking said frangible vial.

30. The method of claim 28, wherein said dispensing step comprises squeezing said outer container to dispense said polymerizable or cross-linkable material.

Substantive  
Control